

## II. AMENDMENTS TO THE CLAIMS

The following is a listing of claims to replace all prior versions and listings of claims in the application:

1. (Currently amended) A summary table manager for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:

at least one computer device including[[:]]

a query analysis system that displays a set of proposed summary tables based on query statistics gathered for a set of inputted queries;

a system for calculating a performance measure for each of the proposed summary tables based on the query statistics, wherein the performance measure is a combination of both time saved and summary table size, wherein the performance measure for a proposed summary table is determined by identifying a first set of execution queries that utilized characteristics exactly matching a proposed summary table, identifying a second set of execution queries that utilized different subsets of characteristics found in the proposed summary table, and merging performance data from first set of execution queries with performance data from the second set of execution queries; and

a system for normalizing performance measures determined for summary tables that are based on different fact tables, wherein the normalizing results in a saved time per MB that is determined by the change in performance time for a summary table divided by the change in size for [[a]] the summary table.

2. (Original) The summary table manager of claim 1, wherein the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.
3. (Previously Presented) The summary table manager of claim 1, wherein the performance measure comprises an estimated amount of time saved for using the proposed summary tables.
4. (Previously Presented) The summary table manager of claim 1, wherein the combination of time saved and summary table size is a multiplication of time saved and summary table size.
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The summary table manager of claim 1, further comprising a performance analysis system that determines an actual performance value of each proposed summary table using feedback from the OLAP database system.
8. (Previously Presented) The summary table manager of claim 7, wherein the performance analysis system compares statistics for queries using identical characteristics that are obtained before and after creation of a proposed summary table.
9. (Original) The summary table manager of claim 1, further comprising an evaluation system

that automatically deletes low performing summary tables.

10. (Currently Amended) A program product stored on a computer readable storage medium for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:

means for generating and displaying a set of proposed summary tables based on query statistics gathered for a set of inputted queries;

means for calculating a performance measure for each of the proposed summary tables based on the query statistics, wherein the performance measure of a proposed summary table is based on a combination of both time saved and summary table size and wherein the performance measure for a proposed summary table is determined by identifying a first set of execution queries that utilized characteristics exactly matching the proposed summary table, identifying a second set of execution queries that utilized a subset of different characteristics found in the proposed summary table, and merging query statistics from first set of execution queries with query statistics from the second set of execution queries; and

means for normalizing performance measures determined for summary tables that are based on different fact tables, wherein the normalizing results in a saved time per MB that is determined by the change in performance time for a summary table divided by the change in size for [[a]] the summary table.

11. (Original) The program product of claim 10, wherein the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.

12. (Previously Presented) The program product of claim 10, wherein the performance measure comprises an estimated amount of time saved for using each proposed summary table.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Previously Presented) The program product of claim 10, further comprising means for determining an actual performance value of each proposed summary table using feedback from the OLAP database system.

17. (Previously Presented) The program product of claim 16, wherein the determining means compares statistics for queries using identical characteristics that are obtained before and after the creation of a proposed summary table.

18. (Original) The program product of claim 10, further comprising means for automatically deleting low performing summary tables.

19. (Currently Amended) A method for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:

generating a set of proposed summary tables based on query statistics gathered for a set of inputted queries;

calculating a performance measure for each of the proposed summary tables based on the query statistics, wherein the performance measure for a summary table is determined by identifying a first set of execution queries that utilized characteristics exactly matching the proposed summary table, identifying a second set of execution queries that utilized any subset of characteristics in the proposed summary table, and merging query statistics from first set of execution queries with query statistics from the second set of execution queries;

utilizing at least one of the proposed summary tables in a subsequent database search; and  
normalizing performance measures determined for summary tables that are based on different fact tables, wherein the normalizing results in a saved time per MB that is determined by the change in performance time for a summary table divided by the change in size for [[a]] the summary table.

20. (Original) The method of claim 19, wherein the step of generating the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.

21. (Original) The method of claim 19, wherein the performance measure comprises an estimated amount of time saved for using the summary table.

22. (Cancelled)

23. (Cancelled)

24. (Previously Presented) The method of claim 19, comprising the further step of determining an actual performance value of each proposed summary table using feedback from the OLAP database system.

25. (Original) The method of claim 24, wherein the step of determining the actual performance value compares statistics for queries using identical characteristics that are obtained before and after the creation of a summary table.

26. (Original) The method of claim 19, comprising the further step of automatically deleting low performing summary tables.